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(54) Title: HYDROXYLATION PROCESS FOR AROMATIC COMPOUNDS CONTAINING A DIOXA- HETEROCYCLIC SYSTEM

(57) Abstract: Process for the hydroxylation of aromatic compounds containing a dioxo-heterocyclic system which comprises directly hydroxylating said compounds with hydrogen peroxide in; the presence of a zeolitic catalyst having the general formula:  $x\text{TiO}_2 \cdot (1-x)\text{SiO}_2$  wherein x is a number ranging from 0.0001 to 0.04.

WO 2004/014827 A1

# INTERNATIONAL SEARCH REPORT

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PCT/EP 03/07056

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 C07C37/60

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data, WPI Data, PAJ

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 840 997 A (MUNSON BRANT P ET AL) 24 November 1998 (1998-11-24) cited in the application Reaction Scheme in column 3 abstract; examples 1,2 ----- -/--	1-10

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>A.K.SINHABABU AND R.T.BORCHARDT:  "Aromatic Hydroxylation.  Hydroxybenzaldehydes from  Bromobenzaldehydes via Reaction of In Situ  Generated, Lithiated alfa-Morpholinobenzyl  Alkoxides with Nitrobenzene"  JOURNAL OF ORGANIC CHEMISTRY,  vol. 48, no. 12, 1983, pages 1941-1944,  XP002258954  page 1943, column 1  page 1943, column 2, paragraph 4 -page  1944, column 1, paragraph 1  page 1944, column 1, paragraph 6 -page  1944, column 2, paragraph 1</p> <p>---</p>	1-10
A	<p>EP 1 110 910 A (CHINA PETROCHEMICAL CORP  ;RES INST OF PETROLEUM PROC SIN (CN))  27 June 2001 (2001-06-27)  page 2, paragraph 2; examples 12,13;  tables 1,2</p> <p>---</p>	1-10
A	<p>US 4 701 428 A (BELLUSSI GIUSEPPE ET AL)  20 October 1987 (1987-10-20)  cited in the application  abstract; example 3  column 2, line 47-61</p> <p>-----</p>	1-10

# INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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